

FIG-4

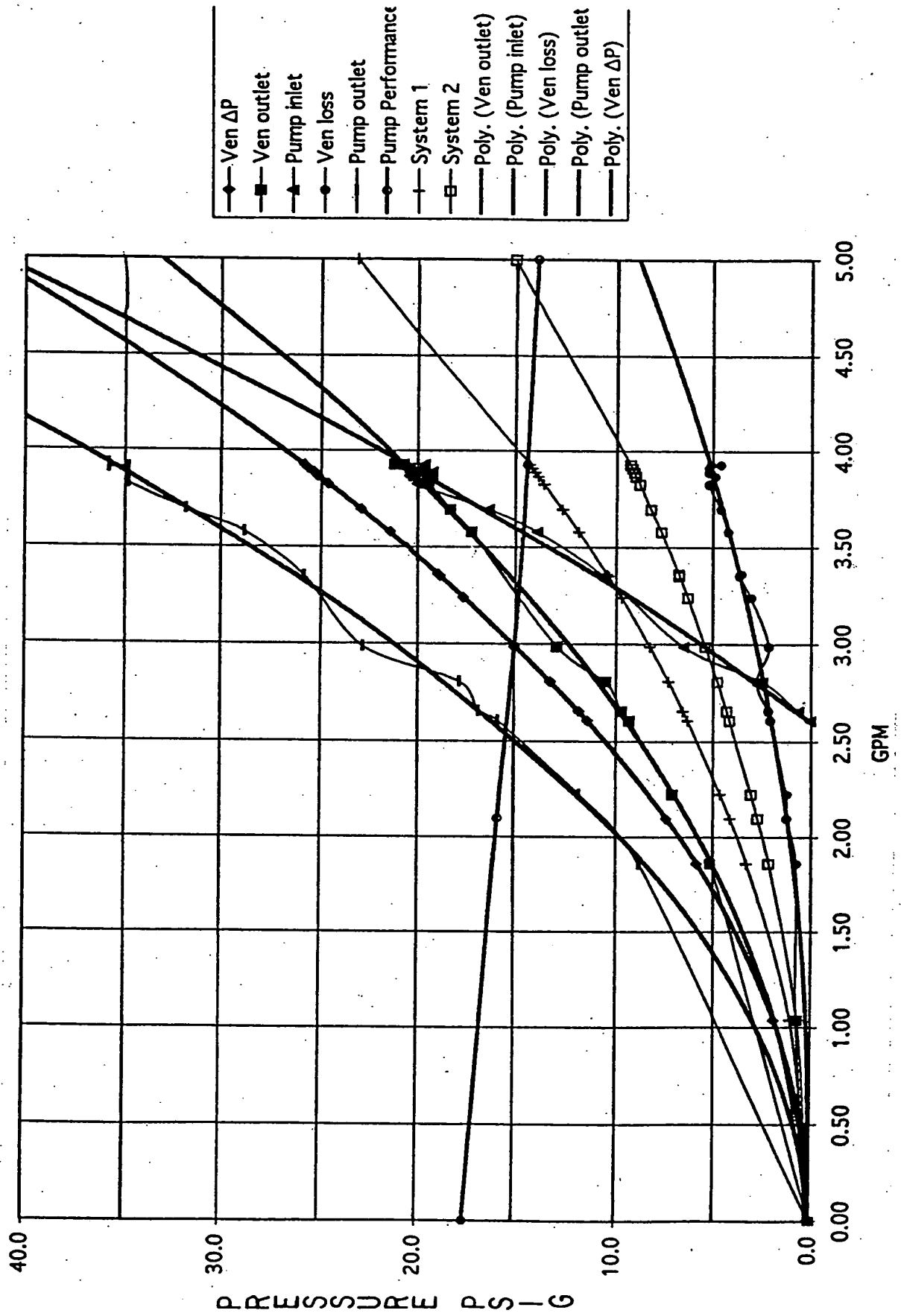


FIG-5

TABLE IV

| D6 Inch | D11/D6 Inch | D11 Inch | Area Sq Inch | Area Sq Ft | Flow GPM | Flow Cu Ft/Sec | Velocity Ft/Sec | Pressure Rise Ft of Water | Pressure Rise PSIG |
|------------|----------------|-------------|-----------------|---------------|-------------|-------------------|--------------------|------------------------------|-----------------------|
| 0.5 | 0.322 | 0.161 | 0.020 | 0.0001 | 1 | 0.0022 | 15.76 | 3.86 | 1.68 |
| 0.5 | 0.322 | 0.161 | 0.020 | 0.0001 | 2 | 0.0045 | 31.52 | 15.43 | 6.70 |
| 0.5 | 0.322 | 0.161 | 0.020 | 0.0001 | 3 | 0.0067 | 47.28 | 34.71 | 15.08 |
| 0.5 | 0.322 | 0.161 | 0.020 | 0.0001 | 4 | 0.0089 | 63.04 | 61.71 | 26.80 |
| 0.5 | 0.322 | 0.161 | 0.020 | 0.0001 | 5 | 0.0111 | 78.80 | 96.42 | 41.88 |
| 0.5 | 0.322 | 0.161 | 0.020 | 0.0001 | 6 | 0.0134 | 94.56 | 138.85 | 60.31 |
| 0.5 | 0.375 | 0.1875 | 0.028 | 0.0002 | 1 | 0.0022 | 11.62 | 2.10 | 0.91 |
| 0.5 | 0.375 | 0.1875 | 0.028 | 0.0002 | 2 | 0.0045 | 23.24 | 8.39 | 3.64 |
| 0.5 | 0.375 | 0.1875 | 0.028 | 0.0002 | 3 | 0.0067 | 34.86 | 18.87 | 8.20 |
| 0.5 | 0.375 | 0.1875 | 0.028 | 0.0002 | 4 | 0.0089 | 46.48 | 33.55 | 14.57 |
| 0.5 | 0.375 | 0.1875 | 0.028 | 0.0002 | 5 | 0.0111 | 58.10 | 52.42 | 22.77 |
| 0.5 | 0.375 | 0.1875 | 0.028 | 0.0002 | 6 | 0.0134 | 69.72 | 75.48 | 32.78 |
| 0.5 | 0.375 | 0.1875 | 0.028 | 0.0002 | 7 | 0.0156 | 81.34 | 102.74 | 44.62 |
| 0.5 | 0.402 | 0.201 | 0.032 | 0.0002 | 1 | 0.0022 | 10.11 | 1.59 | 0.69 |
| 0.5 | 0.402 | 0.201 | 0.032 | 0.0002 | 2 | 0.0045 | 20.22 | 6.35 | 2.76 |
| 0.5 | 0.402 | 0.201 | 0.032 | 0.0002 | 3 | 0.0067 | 30.34 | 14.29 | 6.21 |
| 0.5 | 0.402 | 0.201 | 0.032 | 0.0002 | 4 | 0.0089 | 40.45 | 25.40 | 11.03 |
| 0.5 | 0.402 | 0.201 | 0.032 | 0.0002 | 5 | 0.0111 | 50.56 | 39.69 | 17.24 |
| 0.5 | 0.402 | 0.201 | 0.032 | 0.0002 | 6 | 0.0134 | 60.67 | 57.16 | 24.82 |
| 0.5 | 0.402 | 0.201 | 0.032 | 0.0002 | 7 | 0.0156 | 70.78 | 77.80 | 33.79 |
| 1.6 | 0.399 | 0.6381 | 0.320 | 0.0022 | 60 | 0.1337 | 60.20 | 56.27 | 24.44 |

FIG-6
(PRIOR ART)

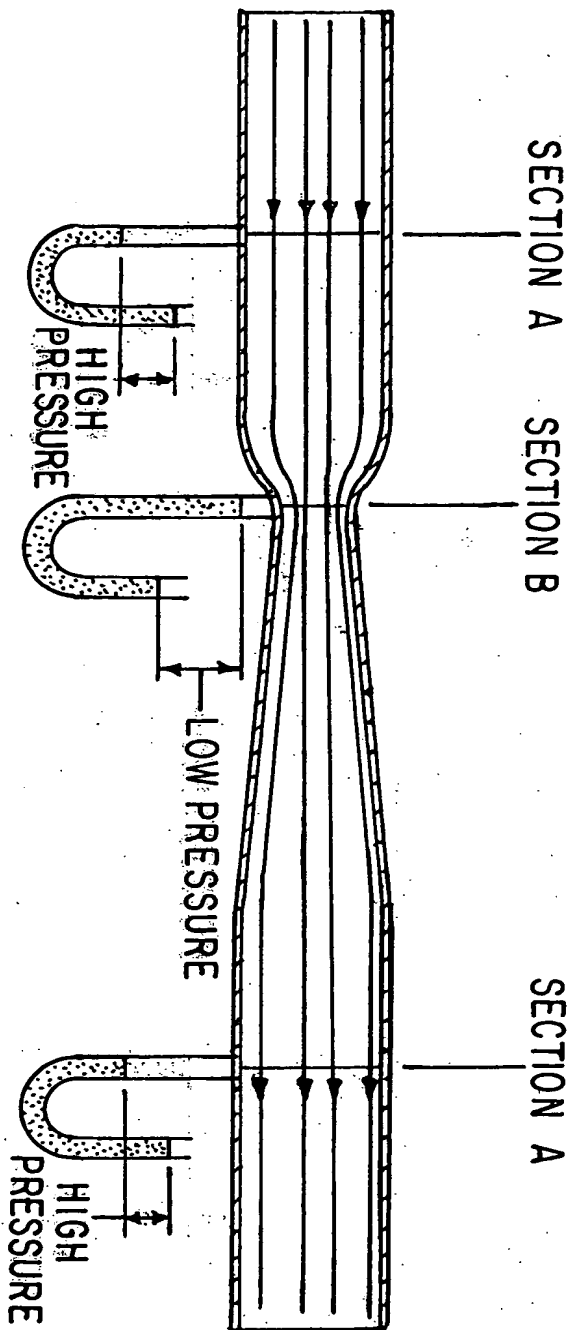


FIG-7

